UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 5 77 West Jackson Blvd. Chicago, Illinois 60604

AIR QUALITY CONSTRUCTION PERMIT

The U. S. Environmental Protection Agency issues this construction permit to the Owner or Operator stated below under the authority of the Clean Air Act and Prevention of Significant Deterioration air quality regulations at Title 40 Code of Federal Regulations Part 52.

Owner or Operator: Energy Alternatives, Inc. 21210 Eaton Avenue, Suite C Farmington, Minnesota 55024

Facility Name and Location: Treasure Island Resort & Casino

5734 Sturgeon Lake Road Red Wing, Minnesota 55066

Prairie Island Indian Community

SIC Code: 4911, Electric services

Responsible Official: Dale Gundberg, President

Energy Alternatives, Inc. Phone: (612) 242-1887 Fax: (651) 460-7529

Permit Contact: Philip Kairis, Operations Manager

Energy Alternatives, Inc. Phone: (612) 245-3750 Fax: (651) 460-7522

This permit allows the Owner or Operator to construct or install at the Facility Location in accordance with terms and conditions of this permit.

Signed January 10, 2001	
Francis X. Lyons, Administrator U. S. EPA - Region 5	Date
Signed January 5, 2001	
Bharat Mathur, Director Air and Radiation Division	Date

U. S. EPA - Region 5

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Section 1. Abbreviations and Acronyms

acfm Actual cubic feet per minute

AR Acid Rain

ARP Acid Rain Program

BACT Best Available Control Technology

CFR Code of Federal Regulations

CO Carbon monoxide

EPA United States Environmental Protection

Agency, Region 5 Office

EU Emissions unit

EU 001,002,003,004 Four (4) internal combustion engine

generator sets

Facility Treasure Island Resort and Casino

g Grams

g/HP-hr Grams per Horsepower-hour

gal Gallon

HAP Hazardous Air Pollutant

hr hour kg kilogram kW Kilowatt lb pound

MACT Maximum Achievable Control Technology

mmBtu million British Thermal Units

MW Megawatt

NESHAP National Emission Standards for

Hazardous Air Pollutants

NOx Nitrogen Oxides NO2 Nitrogen Dioxide

NSPS New Source Performance Standard

NSR New Source Review

Owner or operator Energy Alternatives, Inc.

PM Particulate Matter

PM10 Particulate matter less than 10 microns

in diameter

ppm parts per million

PSD Prevention of Significant Deterioration

psia pounds per square inch absolute

RMP Risk Management Plan rpm Revolutions per minute

SO2 Sulfur Dioxide

U. S. EPA United States Environmental Protection

Agency, Region 5 Office

VOC Volatile Organic Compounds

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Section 2. Facility Description

Energy Alternatives, Inc. proposes to construct four (4) internal combustion diesel-fired engines at the Treasure Island Resort and Casino at 5734 Sturgeon Lake Road, Red Wing, Goodhue County, Minnesota 55066. The engines will be owned and operated by Energy Alternatives, Inc., and located on the property of the Prairie Island Indian Community. The engines will be installed northeast of the Treasure Island Resort and Casino at the Prairie Island Community Wastewater Treatment Facility. The location of the facility housing the engines will be near Highways 61 and 316, between the cities of Hastings and Red Wing, in Goodhue County, Minnesota.

The shaft power of each engine will drive a 1825 kW generator to produce electricity. The electricity produced will be used for peak load management and backup power for the Treasure Island Resort and Casino. The total generation capacity of the engines will be 7.3 megawatts (MW). Electricity generated at the facility will not be sold for distribution. The project is major for the Prevention of Deterioration (PSD) permitting because the potential nitrogen oxide (NOx) emissions from the engine generator project are above 250 tons per year.

The four engines will each be Caterpillar Model 3516B turbocharged engines. The Caterpillar 3516B engines each have 16 cylinders. Each engine operates at a rated speed of 1800 rpm and produces shaft power of 2,593 brake horsepower (BHP). Each engine will burn approximately 130.2 gallons per hour of low sulfur (0.05%) diesel fuel when operated at capacity.

A building will house the four engine generator sets and a control room. It will occupy approximately 3,268 square feet. Additional space outside the building will be required for the electrical transformers, related interconnection equipment, and road access. A 10,000 gallon underground diesel fuel tank is proposed for installation adjacent to the building, and will be subject to underground storage tank regulations under the Resource Conservation, and Recovery Act (RCRA).

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are described in the PSD construction permit application submitted to the United States Environmental Protection Agency (EPA) on May 15, 2000.

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Table 1: Potential Emissions

Potential Emission Rates	VOC	NOx	CO	PM	PM10	SO2	HAPs
Potential hourly emissions per engine (lb/hr)	1.16	37.44	3.05	0.87	0.72	0.91	0.025
Total potential emissions - 4 engines (lb/hr)	4.64	149.7 6	12.20	3.48	2.86	3.65	0.100
Total potential emissions - 4 engines (tpy)	20.32	655.9 5	53.44	15.24	12.53	15.97	0.438
Limited potential emissions - 4 engines (tpy)	0.29	41.18	3.36	0.96	0.79	1.00	0.027

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Section 3. General Permit Conditions

The following general terms and conditions apply under the authority of the Clean Air Act and 40 CFR § 52.21 and 40 CFR § 124.

Issuance and effective date of the permit. After the close of the public comment period required under 40 CFR § 124.10 on the draft permit and after the EPA issues a final permit decision, the permit shall become effective 30 days after service of this decision, unless (1) a later effective date is specified in the decision, (2) review is requested under the appeal procedures under 40 CFR § 124.19, or (3) no comments requested a change in the draft permit, in which case the permit shall become effective immediately upon issuance. A final permit decision means a final decision to issue, deny, modify, revoke and reissue, or terminate a permit.

Construction. The owner or operator shall begin actual construction based on the terms and conditions in this permit on or after the effective date of this permit. Begin actual construction means, in general, initiation of physical on-site construction activities on an emissions unit which are permanent in nature. Such activities include but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures.

Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of the effective date of this permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The EPA may extend the 18-month period upon a satisfactory showing that an extension is justified.

Construction without a Permit. Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to 40 CFR § 52.21 or with the terms of any approval to construct, or any owner or operator of a source or modification subject to 40 CFR § 52.21 who commences construction without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

Construction Approval. Approval for construction or installation shall not relieve any owner or operator of the responsibility to

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comply fully with applicable provisions of any other requirements under Prairie Island Indian Tribe law or Federal law.

Compliance with Permit Requirements. The owner or operator must comply with each permit term and condition. Failure to comply with the terms and conditions of this permit or any other applicable provisions under the Clean Air Act or 40 CFR § 52.21 constitutes noncompliance and a violation of 40 CFR § 52.21 and the Clean Air Act, except those requirements specifically designated as not federally-enforceable, and is grounds for:

- 1. An enforcement action under section 113 of the Clean Air Act,
- 2. Permit termination, revocation and reissuance, or modification in accordance with 40 CFR § 52.21, or
- 3. Denial of a Federal operating permit application under 40 CFR Part 71.

Good Air Pollution Control Practice. At all times, including start-up, shut-down, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate all sources including associated air pollution control equipment regulated by this permit in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance practices are being used is based on information available to the EPA, which may include, but is not limited to, monitoring results, review of operating and maintenance procedures, and inspections of the facility. In addition, the owner or operator shall comply with the following limitations.

- 1. Develop and provide training to orient each facility plant operator to the applicable terms and conditions of this permit. Maintain a log of the time, date, place, and list of attendees for each training session, and a copy of the materials presented in the training sessions. Report to the U. S. EPA, if requested. The records of the training shall be maintained at the facility and available for inspection by authorized representatives of EPA.
- 2. Develop and implement standard operation and maintenance procedures for each emission unit listed in this permit. Keep a copy of the procedures available at a location within the facility that is readily accessible to operators of the sources and to authorized representatives of the EPA.

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3. Keep a copy of this permit on file at the facility.

Enforcement. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

Compliance with Permit Requirements. Compliance with this permit is considered to be compliance with those requirements that are included and specifically identified in the permit, or determined in writing in the permit to be inapplicable.

Credible Evidence. For purposes of establishing whether or not the owner or operator of the facility has violated or is in violation of any standard in this permit, nothing in this permit precludes the use, by the source, the EPA or the public, of any credible evidence to determine whether the facility would have been in compliance with applicable requirements if the appropriate performance test or procedures had been performed.

Severability. The terms and conditions in this permit are distinct and severable. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of this permit. If any term or condition in this permit is held invalid, such invalidity shall not affect other provisions or the application of such terms or conditions.

Permit rescission. This permit shall remain in effect, unless and until it expires under 40 CFR § 52.21(r) or is rescinded. The owner or operator may request that the EPA rescind this permit or a particular portion of this permit. The EPA shall grant an application for rescission if the application shows that 40 CFR § 52.21 would not apply to the source or modification. If the EPA rescinds the permit, or any portion of the permit, the public shall be given adequate notice of the rescission. Publication of an announcement of rescission shall be given in a newspaper of general circulation in the affected region within 60 days of the rescission.

Revocation, Suspension, or Modification of the Permit. This permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the owner or operator for modification, revocation and re-issuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit term or condition.

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Property Rights. This permit does not convey any property rights of any sort, nor any exclusive privilege.

Entry and Inspection procedures: The owner or operator shall allow an officer or employee of the EPA or an inspector authorized by the EPA, upon presentation of credentials to:

- Enter upon the premises where a source subject to this permit is located or where records required by the permit are kept,
- 2. Have access to and copy any records required by the permit,
- Inspect any facilities, equipment, practices, or operations regulated by or referenced in this permit,
 and
- d. Sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

Circumvention. The owner or operator shall not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a Federal air pollution control requirement in this permit, without reducing the total amount of pollutant emitted.

Major Source Requirement. The owner or operator shall obtain permits or permit revisions before constructing or modifying a new source. The owner or operator shall not construct, operate, or modify a source in a manner that would result in a violation of applicable emission standards or interfere with the attainment or maintenance of the ambient air quality standards or maximum allowable ambient concentrations. The owner or operator shall keep a record of all activities undertaken to construct and modify a source and any permits or approvals obtained to perform such activities. Upon request of the EPA, the owner or operator shall submit copies of such records.

Continuous Monitoring Systems. If required by terms and conditions of this permit, install, calibrate, operate and maintain air contaminant emissions and process monitoring equipment on the emissions units as described herein and in documents provided by the owner or operator. Submit monitoring equipment siting, operating, maintenance plans, and procedures for approval by the EPA.

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Section 4. Emission Limits & Requirements: BACT for NOx

This section of the permit contains the requirements for NOx BACT pursuant to the Prevention of Significant Deterioration requirements under 40 CFR § 52.21 imposed by this permit action for Emission Unit Nos. 001, 002, 003, 004, which each represent one of the four (4) Caterpillar Model 3516B turbocharged dieselfired engine generator sets, respectively.

- 1. Nitrogen Dioxide Requirements. The following emissions rates and requirements apply to EU 001, 002, 003, and 004 separately. The owner or operator shall comply with the following requirements:
 - a. **NOx emission rate.** Limit NOx emissions at all times to no greater than 6.55 g/BHP-hr per engine, expressed as NO2, averaged over the duration of the emission performance test or any three consecutive hours.
 - b. **NOx emission rate.** Limit NOx emissions at all times to no greater than 37.44 lb/hr per engine, expressed as NO2, averaged over the duration of the emission performance test or any three consecutive hours.
 - c. NOx emission limit. Limit NOx emissions to no greater than 10.30 tons per year per engine, expressed as NO2, calculated based on a 12-month rolling sum. During the first 12 months after the permit is issued, cumulative NOx emissions expressed as NO2 shall not exceed 10.30 tons per engine. Starting in the 13th calendar month after the permit is issued, NOx emissions expressed as NO2 shall not exceed 10.30 tons per consecutive 12-month period per engine. Compliance with this limit shall be based on a rolling sum of monthly emissions during the previous 12 months.
 - d. Engine operating hours. Limit operating hours of Emission Unit Nos. 001, 002, 003, and 004 to no greater than 550 hours per year based on a 12-month rolling sum. This operating hours limit applies to each unit separately. During the first 12 months after the permit is issued, operating hours of Emission Unit Nos. 001, 002, 003, 004 shall not exceed 550 hours. Starting in the 13th calendar month after the permit is issued, operating hours of Emission Unit Nos. 001, 002, 003, 004 shall not exceed 550 hours per consecutive 12-month

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period. Compliance with that limit shall be based on a rolling sum of monthly emissions during the previous 12 months.

- e. Turbocharger and aftercooler operation. Operate Emission Unit Nos. 001, 002, 003, 004 at all times during operation using a turbocharger and aftercooler, and at lean burn combustion conditions for each engine.
- f. The owner or operator shall maintain the aftercooler return water temperature for each engine at less than or equal to 140 degrees Fahrenheit.
- g. The owner or operator shall continuously monitor the aftercooler water temperature for Emission Unit Nos. 001, 002, 003, and 004. The temperature shall be controlled by thermostatic valves that maintain a 140 degrees Fahrenheit return water temperature to the engine.
- h. **Combustion operation.** Operate Emission Unit Nos. 001, 002, 003, 004 at all times using lean burn combustion conditions for each engine.
- i. The owner or operator shall maintain the intake manifold pressure at 28.1 to 76.2 inches of Hg for 40 to 100% load for each engine. Each engine shall operate only between 40 to 100% load.
- j. The owner or operator shall continuously monitor the intake manifold pressure for Emission Unit Nos. 001, 002, 003, 004
- k. Retard engine timing. Operate Emission Unit Nos. 001, 002, 003, 004 at all times Retard Engine Timing which involves delaying the injection of fuel in the engine for each engine.
- 1. The flash file program #180-1736 which electronically controls each engine shall be set for retard engine timing. The owner or operator shall contact the EPA before modifying any parameters pertaining to retard engine timing for any of the engines.
- m. The owner or operator shall maintain records, which include printouts of digital readouts, gauges, or meters, for times in which the flash file program #180-1736 is modified and any times in which any retard

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engine timing parameters have been changed.

- n. Compliance Test. Conduct source testing on EU 001, 002, 003, and 004 to ascertain compliance with the NOx emission rates and limits in this section in accordance with the requirements set forth in Section 5 of this permit. Determine the NOx emission rate, expressed as NO2, using exhaust properties determined by both Method 19 and exhaust gas measurements as set out in Section 5 and Section 6.
- o. The owner or operator shall certify that electronic controls are set for low emission strategy as required by Conditions 1(e)-(m) in accordance with the requirements in section 7.
- p. **De minimis Pollutants.** Upon request of the EPA, the owner or operator shall conduct performance tests for SO_2 , VOCs, CO, PM, PM_{10} , and HAPs in order to determine whether the actual emission levels represent the limited potential emissions estimates in Table 1 in Section 1 of this permit.

q. Engine Specifications.

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<u>Parameter</u>	Engine/Generator Set			
Emission Units:	EU 001, EU 002, EU 003, EU 004			
Type:	Four (4) Generator Sets			
Manufacture/Model:	Caterpillar Model 3516B			
Type of Fuel:	low sulfur (0.05%) diesel fuel only			
Fuel Consumption Rate @ max. capacity:	130.2 gallons per hour for each engine			
Power Rating:	1825 kW for each engine			
Shaft Power:	2593 brake horsepower (BHP)			
Rated speed:	1800 revolutions per minute (rpm) per engine			
Exhaust height:	25 feet, 5 inches per engine			
Exhaust Diameter:	One 16-inch exhaust per engine			
Exhaust Flow:	15676 acfm per engine			

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Section 5. Performance Testing Requirements

The following terms and conditions apply under the authority of the Clean Air Act and 40 CFR § 52.21.

Initial Compliance Test. Within 60 days after achieving the maximum production rate at which the affected Facility will be operated, but not later than 180 days after initial startup of Emission Unit Nos. 001, 002, 003, and 004 of the Facility, and at such other times as may be required by the EPA under section 114 of the Act, the owner or operator shall conduct performance test(s) for NOx on each engine to ascertain compliance with the emission limits in Section 4 and furnish the EPA a written report of the results of such performance test(s).

Periodic Performance Tests. The owner or operator shall conduct performance test(s) every three (3) calender years, starting three years after the initial compliance test, to determine compliance with the applicable NOx emissions limits in Section 4 and furnish the EPA with a written report of the results of such performance test(s).

Test Reports. Within 45 days after completion of a set of tests, the owner or operator shall submit a copy of the results to the EPA.

Reference Test Methods. The owner or operator shall test EU 001, 002, 003, and 004 for emissions of nitrogen compounds in accordance with the methods and procedures specified in Method 19 of 40 CFR 60, Appendix A for testing nitrogen oxide emissions, unless otherwise approved in advance of the test by the EPA.

Testing Notification. Written notification of the planned test date shall be postmarked or received by the EPA at least 30 days before the planned test date. The EPA shall reject the results of a test if less than 30 days notice is given unless written authorization of a shorter notice was given by the EPA Regional office.

Test Plans. Within 60 days after receiving a request and at least 30 days before the scheduled date of any tests, the owner or operator shall submit a complete plan for conducting the source tests to the EPA for approval. The plan must address the methods and procedures to be used for sampling, testing, and quality assurance, and the operational conditions under which the tests will be performed and documented. Failure to submit a complete plan shall not alter the date by which any test is

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required.

Approval of Test Plan. The owner or operator shall submit to the EPA a test plan with or in advance of the test notification required under this section or in response to the EPA's request for supplemental information. If the proposed test plan does not contain sufficient or accurate enough detail to ensure that the performance test meets the requirements of the applicable requirement or compliance document, EPA may reject the plan, and the owner or operator must address any of EPA's comments on revisions and additions that are necessary to make the plan complete.

Format and content of test plan. The test plan shall be submitted in the following format and include the following elements:

Part I. General information:

- 1. Name and address of emission facility;
- 2. Name, title, telephone number, and facsimile number of contact person at emission facility;
- 3. Permit number or name of other applicable compliance document;
- 4. Reason for testing;
- 5. Schematic drawing of stack and sample ports;
- 6. Location of plant; and
- 7. Name, contact person, telephone number, and facsimile number for testing company contracted to conduct the test.

Part II. Testing requirements:

- List of the emission units, as identified in the applicable requirement or compliance document, and pollutants to be tested, the emission limit for each pollutant, and the applicable rule or regulation for each emission limit; and
- 2. Description of procedure for fuel sampling and analysis, where applicable.

Part III. Operating conditions:

- List of the process or operating rate and conditions of the process equipment and air pollution control equipment for the test;
- 2. List of the range of process or operating rates for each emissions unit; and
- 3. Description of how air pollution control and process equipment will be monitored.

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Part IV. Test methods:

1. List of the methods to be used to determine the emission rate of each pollutant;

- 2. Number of test runs, length of test run, and sampling rate for each method;
- 3. Reference to any applicable requirement or compliance document requiring use of specific methods or procedures;
- 4. Summary of reasons for proposing to use any alternative or equivalent method; and
- 5. For test methods other than reference methods, statement of the detection limit and the degree of accuracy of that method at the expected emission rate and under the conditions of the performance test.

Pretest meeting. The owner or operator shall contact the Air Enforcement and Compliance Assurance Branch, EPA Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, to schedule a pretest meeting to be held between authorized employees of the agency and the owner or operator of the emission facility, with optional representation by the testing company. The pretest meeting shall be held at least seven days prior to the performance test date except that a shorter period shall be allowed if the EPA is able to accommodate a request for such a meeting. If the EPA agrees that an in-person meeting is not necessary, the pretest meeting will be conducted by telephone conference call unless the owner or operator of the emission facility requests an in-person meeting.

Representative Testing Conditions. Performance tests shall be conducted under such conditions as the EPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the EPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

Operating Conditions for Performance Testing. All performance tests shall be conducted at worst case operating (non-malfunction) conditions for all emission units for each air pollutant that is required to be tested unless:

- 1. the applicable requirement or compliance document specifies alternative operating conditions for performance testing; or
- 2. the worst case condition is not known or calculable. In this case, worst case conditions shall be assumed to

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be the maximum achievable process or operating rate of the emissions unit;

Test Runs. Unless otherwise specified by the applicable Reference Test Method, each performance test shall consist of three separate runs. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the EPA's approval, be determined using the arithmetic mean of the results of the two other runs.

Failure to demonstrate compliance. Upon the EPA's written notice that the facility has failed to demonstrate compliance with an applicable emission limit, the owner or operator of the emission facility, unless an alternative schedule is given in an applicable requirement or compliance document, shall:

- 1. Conduct a retest within 30 days of receipt of the EPA written notice;
- 2. Submit to the EPA written notice of testing, submit a test plan for the retest, and schedule a pretest meeting at least 21 days in advance of the date of the retest. The pretest meeting shall be held at least seven days prior to the date of the retest, except that a shorter period shall be allowed if the EPA is able to accommodate such a request for a meeting; and
- 3. Submit a complete report of the results of the retest within 45 days after completion of a set of tests.

The owner or operator may receive an extension to the schedule if one of the following special circumstances applies:

- 1. Seasonal or temporary shutdown of the affected emissions units;
- 2. Malfunction or breakdown of the affected emissions units, unless the EPA determines that a retest under such conditions is warranted in order to determine the effect of the malfunction or breakdown on emissions or where such conditions are representative of past operation of the emissions units;
- 3. Weather conditions that prevent using the applicable test methods or prevent operation of the affected emission units at the required operating conditions;

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4. Any other conditions beyond the control of the owner or operator that prevent using the applicable test methods or prevent operation of the affected emissions units at the required operating conditions; or

5. Any other condition beyond the control of the owner or operator that prevents completion of a retest within the required schedule;

Request for a Retest Extension. Any request for an extension of the time schedule shall be submitted to the EPA in writing by the owner or operator prior to the date by which retesting is required. The request shall specify the reason why the extension is needed, and include an alternative retest schedule. The EPA Regional office shall grant the request for extension if the EPA finds that one or more of the special conditions in this section apply. If the EPA grants an extension, the owner or operator shall implement the alternative retest schedule. A requested extension shall not be effective unless the EPA has given written approval of the extension. The EPA shall not extend a retest date more than 30 days after the start-up, completion of maintenance, seasonal weather change, or other improvement in the special conditions listed in this section. A retest date shall not be extended beyond 30 days.

Agency tests. Upon request of the EPA, the owner or operator of an emission facility shall allow the EPA, or any authorized employee or agent of the EPA, to enter upon the premises of the owner or operator for the purposes of conducting performance tests. The owner or operator shall provide performance testing facilities that enable the agency or its employees or agents to conduct performance tests, including:

- Sampling ports adequate for the applicable test methods;
- 2. Safe sampling platforms;
- 3. Safe access to sampling platforms; and
- 4. Utilities for sampling and testing equipment.

The owner or operator shall operate the emission facility at worst case conditions or other conditions as requested by the EPA, and shall provide assistance in process monitoring and process material sampling as requested.

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Section 6. Annual Testing

Annual testing. The owner or operator shall measure NOx emissions annually using a portable emissions analyzer to determine compliance with the applicable NOx emissions limits in Section 4 and furnish the EPA with a written report of the results of such measurements. The portable emissions analyzer shall be used according to the Portable Electrochemical Analyzer Procedure in Attachment 2 of the permit. This requirement does not apply during the calender years in which a performance test is required, only during years between the periodic performance tests.

Test Reports. Within 45 days after completion of a set NOx emissions measurements, the owner or operator shall submit a copy of the results to the EPA.

Representative Testing Conditions. Annual testing using a portable emissions analyzer shall be conducted under such conditions as the EPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the EPA such records as may be necessary to determine the conditions of annual testing using the portable emissions analyzer. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for such annual testing.

Operating Conditions. All measurements shall be conducted at worst case operating (non-malfunction) conditions for all emission units for each air pollutant that is required to be tested unless:

- 1. the applicable requirement or compliance document specifies alternative operating conditions for annual testing using a portable emissions analyzer; or
- 2. the worst case condition is not known or calculable. In this case, worst case conditions shall be assumed to be the maximum achievable process or operating rate of the emissions unit;

Measurement Cycles. Each test shall consist of at least four (4), but no more than six (6), 15-minute measurement cycles. For the purpose of determining compliance with the applicable standard, the results of all measurement cycles will be added together and divided by the number of measurement cycles to arrive at an average emission rate. The result will be used as one basis for determining compliance with the emission limit in this permit. In

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the event that a sample is accidentally lost or conditions occur in which one of the measurement cycles must be discontinued because of forced shutdown, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, EPA may, in its sole discretion, determine compliance using the arithmetic mean of the results of the non-damaged measurement cycles.

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Section 7. Record keeping, Notification, and Reporting Requirements

The following terms and conditions apply under the authority of the Clean Air Act and 40 CFR § 52.21.

Notification Requirement. The owner or operator shall modify and operate the facility in accordance with the application and application supplements submitted to the EPA for which this permit is based. The owner or operator shall notify the EPA prior to:

- a. Installing an emissions unit or source at the Facility that is not listed in Section 8 of this permit;
- b. Making a change to a source listed in Section 8 that would cause it to deviate from the description of it provided in Section 8; or
- c. Making a change to the emission characteristics of a source, including waste heat recovery, in a manner that would increase the ambient impact beyond that which the EPA used when issuing this permit.

Notification of Construction and Startup. The owner or operator shall furnish the EPA written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:

- a. A notification of the date when construction or installation commences of EU 001, 002, 003, and 004, postmarked no later than 30 days after such date.
- b. A notification of the actual date of initial startup of EU 001, 002, 003, and 004, postmarked within 15 days after such date.
- c. A notification of any physical or operational change to EU 001, 002, 003, and 004 or to the existing facility which may increase the emission rate of any air pollutant in major or significant amounts as defined under 40 CFR 52.21or which would be subject to any applicable emissions standard and standard of performance under 40 CFR parts 60, 61, or 63. This notice shall be postmarked 90 days or as soon as

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practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The EPA may request additional relevant information subsequent to this notice.

Record keeping. The owner or operator shall maintain a file at the Facility Location of the records that are required to be retained. The owner or operator shall retain all records at the Facility Location for at least five (5) years following the creation of such record. Records which must be retained at this location include all calibration and maintenance records, all original recording for continuous monitoring instrumentation, and copies of all reports required by this permit. Records of all monitoring required by this permit, and information about the monitoring, include:

- 1. The aftercooler return water temperature, intake manifold pressure, and any changes to flash file program #180-1736 for emission units 001, 002, 003, and 004
- 2. Hours of operation for emission units 001, 002, 003, and 0.04
- 3. Performance test data and results
- 4. Results of annual testing from the portable emissions analyzer
- 5. Reports of excess emissions
- 6. Changes requiring notification to EPA under this section
- 7. Calibration and maintenance records, original strip chart, or computer-based recordings;
- 8. Sampling dates and the times of sampling or measurement;
- 9. The operating conditions that existed at the time of sampling or measurement;
- 10. The date analyses were performed;
- 11. The location where samples were taken;
- 12. The company or entity that performed the sampling and analyses;
- 13. The analytical techniques or methods used in the sampling and analysis; and
- 14. The results of the analyses.
- 15. Occurrence and duration of any startup, shutdown, or malfunction in the operation of EU 001, 002, 003, and/or 004 or the facility; any malfunction of the air pollution control equipment; or any periods during

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which a continuous monitoring system or monitoring device is inoperative.

Excess Emissions Report. The owner or operator shall report all emissions or operations that exceed or deviate from the requirements of this permit.

The owner or operator shall submit an excess emissions report to the EPA semiannually, except when more frequent reporting is specifically required or the EPA determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. The excess emissions report form shall contain the information and be in the format shown in Attachment 1 unless otherwise specified by the EPA. When no excess emissions have occurred such information shall be stated in the report.

Excess Emissions. The owner or operator shall report all emissions or operations that exceed or deviate from the requirements of this permit and that present a potential threat to human health or safety as soon as possible, but no later than 48 hours, after discovery.

Construction. The owner or operator shall notify the EPA Regional office if the owner or operator has not commenced substantial and continuous installation or construction activity within 18 months after the permit was issued; or ceases substantial or continuous installation or construction activity for 18 or more months before the approved construction or modification is complete.

Information Requests. The owner or operator shall furnish to the EPA any information the Agency requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit, or to determine compliance with the permit. Upon request, the owner or operator shall furnish to the Agency copies of records required to be kept by this permit.

Availability of Information. The availability to the public of information provided to, or otherwise obtained by, the EPA shall be governed by 40 CFR part 2. Any records, reports, or information obtained shall be available to the public, except that upon a showing satisfactory to the EPA by any person that records, reports, or information, or particular part thereof (other than emission data), to which the EPA has access if made public, would divulge methods or processes entitled to protection as trade secrets of such person, the EPA shall consider such record, report, or information or particular

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portion thereof confidential in accordance with the purposes of section 1905 of title 18 of the United States Code, except that such record, report, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out the Clean Air Act or when relevant in any proceeding under the Clean Air Act.

Submittals. Unless otherwise directed by the EPA or this permit, the owner or operator shall submit a copy of all test plans, reports, certifications, notifications, and other information pertaining to compliance with this permit to:

Mr. George Czerniak
Air Enforcement and Compliance
Assurance Branch (AE-17J)
Air and Radiation Division
EPA Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

The owner or operator shall submit copies of permit applications, permit amendments, and other applicable permit information, which includes but not limited to installation of control equipment, replacement of an emissions unit, and changes that contravene permit terms, to:

Mr. Robert Miller, Chief Permits and Grants Section MI/MN/WI (AR-18J) Air and Radiation Division EPA Region 5 77 West Jackson Boulevard Chicago, Illinois 60604

The owner or operator shall submit all submittals that are required by the Acid Rain Program to:

U. S. Environmental Protection Agency Clean Air Markets Division Ariel Rios Building (6204J) 1200 Pennsylvania Avenue N.W. Washington D.C. 20460

Operation of Emissions Units. In any shutdown or breakdown of EU 001, 002, 003, or 004, or deviation from any permit terms, the owner or operator shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The EPA may require feasible and practical modifications in the operation to reduce emissions of air

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pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.

Compliance. Nothing in this permit allows the operation of an emission facility, emissions unit, or stationary source which may endanger human health or the environment; or allows the owner or operator of an emission facility to violate an applicable requirement or compliance document.

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Section 8. Certification

The following terms and conditions apply under the authority of the Clean Air Act and 40 CFR § 52.21.

Certification Requirement. The owner or operator shall certify all reports, compliance certifications, or other documents submitted to the EPA under this permit. All reports must be certified upon submittal.

Annual Compliance Certification. The owner or operator shall submit a compliance certification to the EPA to certify compliance or noncompliance with the applicable terms and conditions in this permit. The compliance certification shall be submitted to the EPA Regional office to the Air Enforcement and Compliance Assurance Branch address listed in Section 6 of this permit. The owner or operator shall submit the compliance certification by January 30th each year for the previous calendar year. The compliance certification report shall:

- 2. Identify the applicable requirement that is the basis of the certification,
- 2. Include the method(s) used for determining the compliance status of the facility,
- 3. Show whether compliance is continuous or intermittent, and
- 4. Include any other facts as required by the EPA

Compliance Certification Report. The compliance certification shall be certified by the responsible official and shall include the following information (all quantities must be reported, even if zero):

- 1. Facility Identification and Reporting Period the compliance certification shall include the name of the company, facility name, location, permit number, and period of time covered by the report.
- 2. The times in which the total 12-month rolling sum of operating hours (separately, for each unit) within the applicable 12-month reporting period for EU 001, 002, 003, and 004 exceeded 550 hours per year based on a 12-month rolling sum.
- 3. The results of any performance tests performed during the 12-month period for EU 001, 002, 003, and 004.
- 4. Results of annual testing from the portable emissions

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analyzer during the 12-month period for EU 001, 002, 003, and 004.

- 5. Reports of any excess emissions, and include copies of any excess emission reports.
- 6. The times during the applicable 12-month reporting period in which the nitrogen oxides emissions rate for EU 001, 002, 003, and 004 exceeded 37.44 lb/hr for each engine during any three (3) hour block average.
- 7. The times during the applicable 12-month reporting period in which the nitrogen oxides emissions rate for EU 001, 002, 003, and 004 exceeded 10.30 tons per year per engine based on a 12-month rolling sum.
- 8. The times during the applicable 12-month reporting period in which the nitrogen oxides emissions rate for EU 001, 002, 003, and 004 exceeded 6.55 g/HP-hr per year per engine.
- 9. Any times during the applicable 12-month reporting period in which EU 001, 002, 003, and 004 did not operate using turbochargers and aftercoolers while any of the applicable engines were in operation. The compliance certification shall state the reasons the turbocharging and aftercoolers were not used, and the actions taken to reduce nitrogen oxide emissions.
- 10. Any deviations from the specified control requirements in Section 4, 1(e)-(m).
- 11. Any changes to the facility in accordance with the requirements under Notification Requirement under Section 6.

Responsible Official. All reports, compliance certifications, or other documents submitted to the EPA under this permit shall include the following statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant

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penalties for submitting false information, including the possibility of fine, imprisonment, or both, for knowing violations. <u>See</u>, <u>e.g.</u>, 18 U.S.C. § 1001."

The certification must be signed by a corporate officer or other responsible management official.

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Section 9. Source Inventory

The owner or operator is authorized under this permit to operate the following stationary emission sources. The design rating, capacity, or throughput is set out in this exhibit only for the purpose of aiding in the identification of the source. The owner or operator must notify the EPA prior to selecting other equipment make, models, and size, to determine the applicability of regulatory requirements.

Source Inventory

Emission Unit	Equipment Use	<u>Description</u>	Capacity	<u>Fuel</u> Type			
Source Group: Engine generator sets							
001	Peaking power generation	Caterpillar Model 3516B turbocharged engine	1825 kW	Diesel			
002	Peaking power generation	Caterpillar Model 3516B turbocharged engine	1825 kW	Diesel			
003	Peaking power generation	Caterpillar Model 3516B turbocharged engine	1825 kW	Diesel			
004	Peaking power generation	Caterpillar Model 3516B turbocharged engine	1825 kW	Diesel			

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Attachment 1:

Excess Emissions Report

Excess Emissions Form

Compa	Company/Owner Name Facility Na		ity Name	Po	ermit Number	
1. Repo	orting period dates: F	rom:		to:		
2. Faci	lity Address:					
3. Pollu	utant:					
4. Ever	nt Information (Use 24	-hour clock):				
		Er	nd Time:	Start Time:		Duration (hr:min):
	Date:		_:	::	_	:
	Date:		_:	::	_	:
					Total:	:
5. Caus	se of Event (Check all	that apply):				
	START UP		PROCESS PRO	OBLEMS	CONTRO	OL EQUIPMENT
	SHUT DOWN		SCHEDULED I	MAINTENANCE	OTHER .	
Provide	a detailed description of	what happened	l. Attach addition	nal sheets as necessary	<u>'</u> .	
_					-	
ldentify Standar	ssion Standard Excee each Emission Standard d or Condition was excee	and Permit Cor				
necessa 	Standard or (Condition		Limit		Exceedance
	ssion Reduction: e in detail, ALL of the me ssary.	asures taken to	minimize and/o	r control emissions dui	ing the event	. Attach additional sheets
	ective Actions: e in detail, ALL of the cor ary.	rective actions	taken to restore	the system to normal o	peration. Att	ach additional sheets as
10. On equipn	a separate page, desc nent.	cribe any cha	nges since the	e last quarter in moi	nitoring, pro	ocess, or control
	on information and belied to this document are				statements	and information in and
Printed	d Name and Title	Signa	ature	D	ate	

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Attachment 2:

Portable Electrochemical Analyzer Procedure

ICAC Test Method For Periodic Monitoring